# U.S. PLANT PATENT APPLICATION OF

# MARK A. SMITH

FOR: CHRYSANTHEMUM PLANT NAMED

'FOXY YONATASHA'

TITLE:

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CHRYSANTHEMUM PLANT NAMED 'FOXY

YONATASHA'

APPLICANT:

MARK A. SMITH

BOTANICAL CLASSIFICATION/CULTIVAR DESIGNATION:

5 Chrysanthemum X morifolium cultivar Foxy Yonatasha

# BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of Chrysanthemum plant, botanically known as *Chrysanthemum* X *morifolium*, commercially known as a garden-type Chrysanthemum and hereinafter referred to by the name 'Foxy Yonatasha'.

The new cultivar is a product of a planned breeding program conducted by the Inventor in Alva, Florida. The objective of the breeding program is to create new garden-type Chrysanthemum cultivars having inflorescences with desirable inflorescence forms, attractive floret colors and good garden performance.

The new Chrysanthemum is a naturally-occurring whole plant mutation of the *Chrysanthemum* X *morifolium* cultivar Yonatasha, disclosed in U.S. Plant Patent number 13,907. The new Chrysanthemum was discovered and selected by the Inventor as a single flowering plant

from within a population of plants of the cultivar Yonatasha in a controlled environment in Alva, Florida in April, 2002. The selection of this plant was based on its desirable inflorescence form, attractive ray floret color and good garden performance.

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Asexual reproduction of the new cultivar by terminal vegetative cuttings taken in a controlled environment in Alva, Florida since June, 2002, has shown that the unique features of this new Chrysanthemum are stable and reproduced true to type in successive generations.

#### SUMMARY OF THE INVENTION

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The cultivar Foxy Yonatasha has not been observed under all possible environmental conditions. The phenotype may vary somewhat with variations in environment such as temperature, daylength and light intensity, without, however, any variance in genotype.

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The following traits have been repeatedly observed and are determined to be the unique characteristics of 'Foxy Yonatasha'. These characteristics in combination distinguish 'Foxy Yonatasha' as a new and distinct cultivar:

- 1. Upright and outwardly spreading plant habit.
- 2. Freely branching habit; dense and full plants.

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3. Uniform and very freely flowering habit.

- 4. Large daisy-type inflorescences with elongated oblong-shaped ray florets.
- Red-colored ray florets and bright yellow-colored disc florets.
- 6. Natural season flowering in mid September in the Northern Hemisphere.

In side-by-side comparisons conducted in Alva, Florida, plants of the new Chrysanthemum differed from plants of the parent, the cultivar Yonatasha in the following characteristics:

- 1. Plants of the new Chrysanthemum flowered several days later than plants of the cultivar Yonatasha when grown under natural season conditions.
- 2. Plants of the new Chrysanthemum and the cultivar Yonatasha differed in ray floret coloration as plants of the cultivar Yonatasha had coral pink-colored ray florets.

Plants of the new Chrysanthemum can be compared to plants of the Chrysanthemum cultivar Hot Salsa, disclosed in U.S. Plant Patent number 11,918. In side-by-side comparisons conducted in Alva, Florida, plants of the new Chrysanthemum differed from plants of the cultivar Hot Salsa in the following characteristics:

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- 1. Plants of the new Chrysanthemum were larger and more rounded than plants of the cultivar Hot Salsa.
- 2. Plants of the new Chrysanthemum flowered about three weeks earlier than plants of the cultivar Hot Salsa when grown in southern climates.
- 3. Ray florets of plants of the new Chrysanthemum were darker red in color than ray florets of plants of the cultivar Hot Salsa.

Plants of the new Chrysanthemum can also be compared to plants

of the Chrysanthemum cultivar Red Temptress, not patented. In side-byside comparisons conducted in Alva, Florida, plants of the new

Chrysanthemum differed from plants of the cultivar Red Temptress in the
following characteristics:

- 1. Plants of the new Chrysanthemum were smaller and more rounded than plants of the cultivar Red Temptress.
- 2. Plants of the new Chrysanthemum had larger inflorescences than plants of the cultivar Red Temptress.
- 3. Plants of the new Chrysanthemum flowered about four weeks earlier than plants of the cultivar Red Temptress when grown in southern climates.

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#### BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photographs illustrate the overall appearance of the new Chrysanthemum. These photographs show the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photographs may differ slightly from the color values cited in the detailed botanical description which accurately describe the colors of the new Chrysanthemum.

The photograph on the first sheet comprises a side perspective view of a typical flowering plant of 'Foxy Yonatasha' grown in a container. The photograph on the second sheet comprises a close-up view of typical inflorescences of the cultivar 'Foxy Yonatasha'.

#### DETAILED BOTANICAL DESCRIPTION

In the following description, color references are made to the Royal Horticultural Society Colour Chart, 1995 Edition, except where general terms of ordinary dictionary significance are used. The following observations and measurements describe plants grown in Alva, Florida during the winter in a fiberglass-covered greenhouse under conditions and practices which approximate those generally used in commercial gardentype Chrysanthemum production. One cutting was planted in a 15.25-cm container in early December, 2002. Plants were pinched one time, that is, the terminal apex was removed to enhance branching, at the end of

December. One week after the pinch, plants were exposed to short day/long night photoperiodic treatments until flowering. During the production of the plants, day temperatures averaged 26°C and night averaged 18°C. Measurements and numerical values represent averages for typical flowering plants.

# **BOTANICAL CLASSIFICATION:**

Chrysanthemum X morifolium cultivar Foxy Yonatasha.

#### **COMMERCIAL CLASSIFICATION:**

Daisy-type garden Chrysanthemum.

# 10 PARENTAGE:

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Naturally-occurring whole plant mutation of the *Chrysanthemum* X *morifolium* cultivar Yonatasha, disclosed in U.S. Plant Patent number 13,907.

### PROPAGATION:

15 Type: Terminal vegetative cuttings.

Time to initiate roots: About four days at 21°C.

Time to produce a rooted cutting: About ten to twelve days at 21°C.

Root description: Fine, fibrous; white in color.

20 Rooting habit: Freely branching.

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#### PLANT DESCRIPTION:

Plant form/growth habit: Perennial herbaceous daisy-type garden Chrysanthemum. Inverted triangle with mounded crown. Stems initially upright, then outwardly spreading. Freely branching with about ten lateral branches per plant. Moderately vigorous to vigorous.

Plant height: About 17 cm.

Plant diameter: About 28 cm.

Lateral branches:

Length: About 15.5 cm.

Diameter: About 2 mm.

Internode length: About 1 cm.

Aspect: Upright and outwardly spreading.

Texture: Pubescent.

15 Color: 146A.

Foliage description:

Leaf arrangement: Alternate.

Length: About 5.4 cm.

Width: About 3.9 cm.

Apex: Mucronate.

Base: Truncate.

Margin: Palmately lobed, sinuses divergent to parallel.

Texture, upper surface: Slightly pubescent.

Texture, lower surface: Pubescent; veins prominent.

Color:

Developing foliage, upper surface: Slightly darker

than 147A.

Developing foliage, lower surface: 147B.

Fully expanded foliage, upper surface: 147A.

Fully expanded foliage, lower surface: 147B.

Venation, upper surface: 147A.

Venation, lower surface: Close to 147B.

Petiole length: About 1.8 cm.

Petiole diameter: About 1.75 mm.

Petiole color, upper surface: 147A to 147B.

Petiole color, lower surface: 147B.

#### INFLORESCENCE DESCRIPTION:

Appearance: Daisy-type inflorescence form with elongated oblong-shaped ray florets. Inflorescences borne on terminals above foliage, arising from leaf axils. Disc and ray florets developing acropetally on a capitulum. Very freely flowering with about 32 inflorescences per lateral branch.

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Flowering response: Under natural season conditions, plants flower in mid September in the Northern Hemisphere.

Inflorescence bud (before showing color):

Height: About 4.5 mm.

Diameter: About 6 mm.

Shape: Oblate.

Color (lower surface of phyllaries): Darker than 146A to

close to 147A.

Inflorescence size:

Diameter: Large, about 5 cm.

Depth (height): About 1 cm.

Disc diameter: About 1.3 cm.

Receptacle diameter: About 3.5 mm.

Ray florets:

15 Shape: Elongated oblong, narrow.

Length: About 2.5 cm.

Corolla tube length: About 2.5 mm.

Width: About 5 mm.

Apex: Emarginate.

20 Margin: Fused.

Texture: Smooth, glabrous; velvety.

Surface: Flat to reflexed.

Orientation: Initially upright, then perpendicular to vertical.

Number of ray florets per inflorescence: About 26 in a

single whorl.

5 Color:

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When opening and fully opened, upper surface: 6A overlain with 53A to 59A; color becoming closer to

185B with development.

When opening and fully opened, lower surface:

Close to 6D underlain with close to 59A.

Disc florets:

Shape: Tubular; apex dentate, five-pointed.

Length: About 5 mm.

Width, apex: About 2 mm.

Width, base: About 1 mm.

Number of disc florets per inflorescence: About 102.

Color:

Immature: Close to 154A to 9A.

Mature:

20 Apex: Close to 9A.

Mid-section: Close to 144B.

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Base: Close to 155D.

Phyllaries:

Quantity per inflorescence: About 16.

Length: About 6 mm.

Width: About 3 mm.

Shape: Lanceolate.

Apex: Acute.

Base: Truncate.

Margin: Entire.

Texture, upper surface: Smooth, waxy.

Texture, lower surface: Pubescent.

Color, upper surface: Close to 147A.

Color, lower surface: Darker than 146A to close to 147A.

Peduncle:

Length:

First peduncle: About 4.5 cm.

Fourth peduncle: About 6.6 cm.

Seventh peduncle: About 10.4 cm.

Diameter: About 1.5 mm.

Strength: Strong.

Aspect: About 40° from vertical.

Texture: Pubescent.

Color: 144A.

# Reproductive organs:

Androecium: Present on disc florets only.

5 Anther color: 9A.

Pollen: None observed.

Gynoecium: Present on both ray and disc florets.

Seed/fruit: Seed and fruit production has not been observed.

# **DISEASE/PEST RESISTANCE:**

Plants of the new Chrysanthemum have not been shown to be resistant to pathogens and pests common to Chrysanthemums.

# **GARDEN PERFORMANCE:**

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Plants of the new Chrysanthemum have been observed to be tolerant to rain, wind and temperatures ranging from 0 to more than 38°C.